

CLAIMS

What is claimed is:

1. A drug delivery system, comprising:
 - a top flow path;
 - a conduit with an end in communication with the top flow path and an end configured to communicate with a nebulizer;
 - a connection port on the conduit configured to reversibly attach to a nebulizer;
 - a nebulizer in-flow path disposed within the conduit configured to communicate with a nebulizer; and
 - a nebulizer out-flow path disposed within the conduit configured to communicate with a nebulizer and the top flow path, wherein the nebulizer out-flow path is separate from the nebulizer in-flow path.
2. The drug delivery system of claim 1, wherein the top flow path is configured to direct a flow into a patient's lungs.
3. The drug delivery system of claim 2, wherein the top flow path further comprises a vent inlet configured to direct a flow into the top flow path.

4. The drug delivery system of claim 3, wherein the vent inlet is configured to be selectively sealable.

5. The drug delivery system of claim 1, wherein the nebulizer in-flow path is configured to direct flow into a nebulizer, and the nebulizer out-flow path is configured to direct flow out of a nebulizer.

6. The drug delivery system of claim 1, wherein the nebulizer in-flow path and the nebulizer out-flow path are coaxially disposed with respect to one another.

7. The drug delivery system of claim 1, wherein the connection port is configured to reversibly sealably attach to a nebulizer.

8. The drug delivery system of claim 7, wherein the nebulizer is configured to aerosolize a substance into a gas.

9. The drug delivery system of claim 8, wherein the gas comprises air.

10. The drug delivery system of claim 1, wherein the nebulizer in-flow path comprises an entrance configured to be selectively sealable.

11. A nebulizer mouthpiece, comprising:

a user interface having a delivery port;
a conduit connected to the user interface,
a connection port on the conduit, wherein the connection port is reversibly attachable to a corresponding fitting and the user interface and the connection port are configured to define a flow path between an aerosolization area and the delivery port;

an intake flow path configured to communicate with an aerosolization area; and

an exhaust flow path configured to communicate with an aerosolization area, wherein the exhaust flow path and the intake flow path are combined.

12. A drug delivery mouthpiece, comprising:

a hollow body with a top and a bottom;

an intake port and a delivery port proximate the top of the hollow body;

a reversibly attachable connection port proximate the bottom of the hollow body;

nebulizer inlet and a nebulizer outlet proximate the bottom of the hollow body; and

a baffle at least partially disposed within the hollow body.

13. The drug delivery mouthpiece of claim 12, wherein the baffle defines an intake flow path between the intake port and the nebulizer inlet through the hollow body

and a delivery flow path between the nebulizer outlet and the delivery port through the hollow body.

14. The drug delivery mouthpiece of claim 13, wherein the baffle comprises a conduit with the intake flow path disposed within the conduit and the delivery flow path disposed outside the conduit.

15. The drug delivery mouthpiece of claim 13, wherein the baffle comprises a substantially planar member disposed between the intake flow path and the delivery flow path.

16. The drug delivery mouthpiece of claim 13, wherein the connection port is configured to reversibly attach to a chamber.

17. The drug delivery mouthpiece of claim 16, wherein the baffle is configured to protrude into a chamber connected to the connection port.

18. The drug delivery mouthpiece of claim 17, wherein the baffle is configured to direct the intake flow path out of the hollow body and into a chamber connected to the connection port, and the baffle is configured to direct the delivery flow path from a chamber connected to the connection port into the hollow body.

19. The drug deliver mouthpiece of claim 12, wherein the delivery port is disposed on a conduit attached proximate a top of the hollow body.
20. The drug delivery system of claim 19, wherein the conduit comprises an exhaust outlet.
21. The drug delivery system of claim 20, wherein the exhaust outlet is selectable sealable.
22. The drug delivery system of claim 21, wherein the exhaust outlet comprises a one-way valve.
23. The drug delivery mouthpiece of claim 12, wherein the intake port is sealably configured.